

# MAGNETIC POSITION DETECTION APPARATUS FOR MICRO MACHINED OPTICAL ELEMENTS

## ABSTRACT OF THE DISCLOSURE

5 An apparatus having magnetic detection sensor deployed on a micro machined optical element is exposed to a magnetic field to sense change in property as the micro machined optical element is manipulated with respect to the magnetic field, and, conversely when the magnetic field is manipulated with respect to the micro machined optical element. The electrical, optical and/or mechanical change in sensor property varies according to said

10 manipulation, and telemetry created by said property change tracks the manipulation of the moveable portion of the optical element. The system includes a configuration capable of compensating for temperature variation.